



## AN OUTLINE OF THE PROPER ORGANIZATION OF THE SURGICAL TEACHING IN A MEDICAL SCHOOL.<sup>1</sup>

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MEDICAL education was conducted in America for many years on a system quite at variance with that recognized as satisfactory in other departments of pedagogics. Medical teachers have recently come to see the defects of the old method, and have earnestly striven to adapt modern educational ideas to the requirements of the medical curriculum.

To me these endeavors have had a never failing interest; which has led me to advocate, at the Woman's Medical College of Pennsylvania, certain measures and methods which represent my opinions as to what is needed in the department with which I am entrusted.

It has been impossible up to the present time to carry out my views in their entirety, because time is requisite to obtain money and opportunity for such expansion of the surgical department without encroaching unduly upon the rights of other chairs. In the main, however, the surgical teaching is conducted on the lines indicated in this sketchy outline.

It is offered as a contribution to the discussion on educational problems, which has so stirred the medical profession of late, by one who recognizes that ideals in pedagogics, as elsewhere, can only be reached by constant striving for what at first seems unattainable.

The material is arranged under three heads: *A. Method of Instruction; B. Teaching Staff; C. Distribution of Students' Work.*

### A.—METHOD OF INSTRUCTION.

#### DIDACTIC LECTURES.

Upon selected subjects; preferably those most difficult to understand, i.e., inflammation, tumors, hernia, cerebral surgery.  
Must be demonstrative and illustrated by black-board diagrams.

#### RECITATIONS.

Upon subjects not covered by the didactic lectures.  
Upon subjects treated in didactic lectures, so as to serve as a review.  
Student should be required to make blackboard diagrams to illustrate his answers, write prescriptions, etc.

#### CLINICAL CONFERENCES.

Consist in oral reports made by students before the class upon patients assigned to them for study; may be dispensary cases or cases taken from hospital.  
One or two students to be assigned to a single patient; and report on symptoms, diagnosis, and treatment.  
The teacher, after hearing report, questions student and directs his attention to points overlooked, or gets class to do so.  
Student should be taught to use his reasoning faculties and should use blackboard in demonstrating operations, etc.  
The class at large takes part in these conferences by being questioned on the student's report.

#### SPECIAL OPERATIONS.

Invitations to be present at operations not done before classes; so that students may get near and act as junior assistants.

#### BEDSIDE INSTRUCTION.

Taking pulse, temperature, and respiration. Examining tongue, urine, feces, etc. Applying cups, washing wounds, and shaving skin. Applying bandages, blisters, poultices, plasters,

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stupes. Keeping case-histories and records of treatment. Under supervision of instructors, resident physicians, and nurses.

#### LECTURES ON OPERATIVE SURGERY.

Short demonstrations on cadaver and blackboard of the surgical anatomy of the region to be operated upon in the surgical laboratory.

Very short discussion of the reasons for the operation to be performed.

These demonstrations to be given to the section of the class working in the surgical laboratory.

#### OPERATIONS ON CADAVER.

Two members of the section of the class to perform assigned operations on the cadaver. One student to act as assistant to the other.

This work to be done immediately after Demonstrative Lectures on Operative Surgery just discussed.

#### MACROSCOPIC DEMONSTRATIONS OF CLINICAL SPECIMENS.

Careful explanation and examination of the naked eye appearances of specimens obtained from the patients seen by the class.

#### BACTERIOLOGICAL AND MICROSCOPICAL EXAMINATIONS OF CLINICAL SPECIMENS.

Thorough investigation to be made and prompt report on the specimens, such as tumors, pus, etc., obtained from patients seen by the class in the clinics and college hospital.

Demonstrations of these specimens in the laboratory.

Diagnosis to be made by students of the tumors, etc., so examined by microscope.

#### BANDAGING.

Practical instruction to be given in applying bandages of various kinds on the manikin and human body; the students are to do this work with their own hands.

#### FRACTURE DRESSING.

Students are also to apply splints, plaster jackets, and orthopedic apparatus on the manikin and human body, using each other as living models.

### B.—TEACHING STAFF.

#### a. PROFESSOR.

General supervision of all instruction.

Didactic Lectures.

Amphitheater Clinics.

Clinical Conferences.

Special Operations.

Bedside Instruction.

Occasional Recitations.

Occasional Lectures on Operative Surgery.

#### b. CLINICAL PROFESSOR.

Amphitheater Clinics.

Clinical Conferences.

Special Operation.

Bedside Instructions.

#### c. ADJUNCT PROFESSOR.

Recitations on Didactic Lectures.

Recitations from Text-Books.

Lectures on Operative Surgery.

Operations on Cadaver by Sections of Class.

Bedside Instruction.

#### d. SURGICAL PATHOLOGIST.

Macroscopic Demonstrations of Clinical Specimens.

Bacteriological Examinations of Clinical Specimens.

Histological Examinations of Clinical Specimens.

Demonstrations of Pathological Findings to Class.

Bacteriological and Histological Diagnosis.

#### e. DEMONSTRATOR.

Bandaging.

Application of Fracture Apparatus.

Application of Plastic Jackets and Orthopedic Apparatus.

#### f. ASSISTANT DEMONSTRATORS.

To aid in work of Adjunct Professor and Demonstrators.

#### g. CLINICAL INSTRUCTORS.

To aid in work of Professors and Adjunct Professor.

### C. DISTRIBUTION OF STUDENTS' WORK.

Class.

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|---|---|
| First year.   | Bandaging; in Sections of not over 24.  |
| Second year.  | Surgical Bacteriology; Demonstrations of Specimens.   |
| Second year.  | Surgical Microscopy; Demonstrations of Specimens.   |
| Third year.   | Bacteriological and Histological Diagnosis; in Sections of not over 10.                                   |
| Second and Third years.                             | } Didactic Lectures.<br>Recitations on Didactic Lectures.<br>" on Text Book.                              |
| Second and Third years.                             |   |
| Third year.   |   |
| Third year.   | Application of Fracture Apparatus, Plaster Jackets, and Orthopedic Apparatus; in Sections of not over 24. |
| Third year.   | Lectures on Operative Surgery; in Sections of not over 24.  |
| Third year.   | Operations on Cadavers; in Sections of not over 24.   |
| Third and Fourth years.                             | } Amphitheater Clinics.   |
| Fourth year.  |   |
| Fourth year.  | Clinical Conferences; between Class and Sections of not more than 4.                                      |
| Fourth year.  | Bedside Instruction; in Sections of not more than 6.  |
| Fourth year.  | } Instruction in taking Case Histories.<br>Writing Surgical Essays and Consulting Surgical Literature.    |
| Fourth year.  |   |
| Work to be marked by instructors during the Course. |   |
| Examinations at end of third and fourth years.      |   |